



SECTION – D

Answer **any six**. (Short essay type questions. **Each** question carries a weightage of 2)

19. Give an account of schizocarpic fruits.
20. Describe floral transition in Nymphaeaceae giving suitable illustrations.
21. Enumerate the diagnostic features of Apiaceae.
22. Describe the corolla in Papilionaceae with the help of diagrams.
23. Give an account of the special types of inflorescences.
24. Mention the economic importance of Malvaceae.
25. What do you know about floral diagram ?
26. Give the botanical names and family of (a) Celery (b) Ash gourd (c) Cashewnut and (d) Castor. (6×2=12)

SECTION – E

Answer **any one**. (Essay type questions. **Each** question carries a weightage of 4)

27. Mention the characteristic features of cymose inflorescences and describe the different types giving diagrammatic sketches.
28. Describe the different types of (a) Phyllotaxy and (b) Aestivation with the help of sketches.
29. Explain the different systems of classification. Give a brief account of a natural system of classification studied by you. (1×4=4)



Reg. No. :

Name :

**VI Semester B.Sc. Degree (CCSS-Reg./Supple./Improv.) Examination,
May 2014
Core Course in Botany/Plant Science
6B11 BOT/PLS : DIVERSITY OF LIFE-3 : ANGIOSPERM SYSTEMATICS
AND MORPHOLOGY**

Time : 3 Hours

Max. Weightage : 30

Instruction : Draw diagrams wherever necessary.

SECTION – A

Answer **all**. (Questions in bunches of **four**. **Each** bunch carries a weightage of **one**)

1. Choose the correct answer :

- i) The plant Dioscorea is a

a) monocot with reticulate venation	b) monocot with parallel venation
c) dicot with parallel venation	d) dicot with reticulate venation
- ii) The distinguishing character of imparipinnate leaf is

a) leaflets formed in pairs	b) leaflets large
c) rachis terminated by an unpaired leaflet	d) rachis modified
- iii) The specimen or illustration used or designated by an author as the nomenclatural type is called

a) Syntype	b) Lectotype	c) Holotype	d) Neotype
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- iv) The medicinal plant *Gymnema sylvestre* belongs to

a) Apiaceae	b) Asclepiadaceae
c) Acanthaceae	d) Amaranthaceae

2. State **true** or **false** :

- i) Monocarpellary, unilocular gynoecium with marginal placentation is found in Papilionaceae.
- ii) A coenanthium has a single female flower surrounded by five groups of male flowers, ensheathed by jointed bracts.
- iii) Parachute mechanism of fruit and seed dispersal commonly occurs in Fabaceae.
- iv) A diagram indicating the evolutionary relationship of a group of individuals is called cladogram.

3. Fill in the blanks :

- i) The tuft of fine hairs formed from the calyx of the florets in a capitulum is called _____.
- ii) The stamens are called _____ when they are attached to the perianth lobes.
- iii) Bilabiate corolla is a characteristic feature in the family _____.
- iv) The phenomenon called resupination is found in members of _____.

4. Rearrange column **B** and **C** to match column **A** :

	A	B	C
i	Epicalyx	Leucas	Asclepiadaceae
ii	Gynostegium	Citrus	Malvaceae
iii	Gynobasic style	Calotropis	Rutaceae
iv	Polyembryony	Hibiscus	Lamiaceae

5. Answer in **one** word or **one** sentence :

- i) What is a monograph ?
- ii) Give the scientific name of snake gourd.
- iii) Name the antihypertensive drug prepared from *Rauvolfia serpentina*.
- iv) Write the botanical name of the vegetable with persistent sepals. (5×1=5)



SECTION – B

Answer **any four** (Each question carries a weightage of 1)

Differentiate the following :

6. Corymb and umbel.
7. Diplostemony and obdiplostemony.
8. Involucre and involucrel
9. Synonym and tautonym.
10. Apocarp and syncarp.
11. Legume and follicle. (4×1=4)

SECTION – C

Answer **any five** (Short answer questions. Each question carries a weightage of 1)

12. Give the botanical names of two oil yielding plants in Asteraceae. Name the oils.
13. What do you mean by accrescent calyx ? In which common plant can you observe it ?
14. Write a note on the fruit of castor plant.
15. Name the characteristic fruit in Apiaceae. What are its features ?
16. What is ICBN ? What is its present name ?
17. Enumerate the salient features of Passiflorales.
18. What is numerical taxonomy ? (5×1=5)